

CLAIMS

- 5 1. Apparatus for deriving energy from waves, the apparatus comprising a chamber adapted to float in water but having a water plane area such that its vertical oscillating movement is substantially damped relative to the height of waves in the water in which it is floating, a chamber inlet port at one end of the chamber adapted to face into a wavetrain, a baffle in the chamber, and vertical side plates delivering compressed air to a manifold and thence to an outlet port and a baffle.
- 10
2. Apparatus as claimed in claim 1, in which, in use, waves travel through the inlet port and compress air in the wave troughs as each wave advances into the manifold and then hits the baffle whereby the compressed air is forced out of the outlet port to provide a
- 15 source of energy.
3. Apparatus as claimed in claim 1 or claim 2, in which the chamber is an elongate chamber.
- 20 4. Apparatus as claimed in any preceding claim, in which the chamber is formed from a pair of side walls spaced apart by a top plate.
5. Apparatus as claimed in claim 4, in which one end of the side walls is joined by an end wall and the other end of the side walls are spaced to provide the inlet port.
- 25 6. Apparatus as claimed in claim 5, in which a bottom plate spans the side walls and the side walls provide at least part of the buoyancy for the chamber.

-8-

7. Apparatus as claimed in claim 5 or claim 6, in which the baffle is provided adjacent
5 the end wall.
8. Apparatus as claimed in any preceding claim, in which the baffle tapers towards the inlet port.
- 10 9. Apparatus as claimed in any preceding claim, in which the chamber includes a pair of tapering side plates adjacent each side wall to compress the air entering in successive wave troughs.
- 15 10. Apparatus as claimed in claim 9, in which the angle of taper of the side plates is adjustable.
11. Apparatus as claimed in any preceding, in which an internal ramp is provided between the inlet port and the manifold.
- 20 12. Apparatus as claimed in claim 11, in which the angle of the ramp is adjustable.
13. Apparatus as claimed in any preceding claim, in which the air outlet port leads off the manifold adjacent the baffle.
- 25 14. Apparatus as claimed in any preceding claim, in which a wave water outlet is provided in the chamber adjacent the baffle.

-9-

15 Apparatus as claimed in any preceding claim, in which means are provided to
5 adjust the buoyancy of the chamber to adjust its height in the water to suit different wave
conditions.

16. Apparatus for deriving energy from waves substantially as hereinbefore described
with reference to and as shown in the accompanying drawings.

10